In the Claims

Please amend the claims, without prejudice, as follows:

1. (Currently Amended) A method for treating a human subject afflicted with atrial tachyarrhythmia comprising administering to the human subject a therapeutically effective amount of an agent, which restores normal gating to a type 2 ryanodine receptor (RyR2) channel in the human subject's heart, thereby treating the human subject, wherein the agent is a N-substituted derivative of 1,4-benzothiazepine.

2. (Canceled).

3. (Original) The method of claim 1, wherein the atrial tachyarrhythmia is an atrial fibrillation or a supraventricular tachyarrhythmia.

4. (Currently Amended) A method for treating a human subject afflicted with atrial tachyarrhythmia comprising administering to the human subject a therapeutically effective amount of an agent, which inhibits dissociation of FKBP12.6 from a type 2 ryanodine (RyR2) receptor in the human subject's heart, thereby treating the human subject, wherein the agent is an N-substituted derivative of 1,4-benzothiazepine.

5. (Original) The method of claim 4, wherein the atrial tachyarrhythmia is an atrial fibrillation or a supraventricular tachyarrhythmia.

6. (Currently Amended) The method of claim 4, wherein the agent is JTV-519 ~~a derivative of 1,4-benzothiazepine~~.

7-12 (Canceled)

13. (Currently Amended) A method for inhibiting the onset of atrial tachyarrhythmia in a human subject comprising administering to the human subject a prophylactically effective amount of an agent, which restores normal gating to a type 2 ryanodine receptor (RyR2) in the human subject's heart, thereby inhibiting the onset of an atrial tachyarrhythmia in the human subject, wherein the agent is a N-substituted derivative of 1,4-benzothiazepine.

14. (Canceled)

15. (Original) The method of claim 13, wherein the atrial tachyarrhythmia is an atrial fibrillation or a supraventricular tachyarrhythmia.

16. (Currently Amended) A method for inhibiting the onset of atrial tachyarrhythmia in a human subject comprising administering to the human subject a prophylactically effective amount of an agent, which inhibits dissociation of FKBP12.6 from a type 2 ryanodine (RyR2) receptor in the human subject's heart, thereby inhibiting the onset of atrial tachyarrhythmia in the human subject, wherein the agent is an N-substituted derivative of 1,4-benzothiazepine.

17. (Original) The method of claim 16, wherein the atrial tachyarrhythmia is an atrial fibrillation or a supraventricular tachyarrhythmia.

18. (Currently Amended) The method of claim 16, wherein the agent is JTV-519 ~~a derivative of 1,4-benzothiazepine~~.

19-24. (Canceled)

25. (Previously Presented) The method of claim 1, wherein the amount of an agent is selected from the concentration range of about 100 nM to about 1000 nM.

26. (Previously Presented) The method of claim 1, wherein administering is performed topically, intravenously, pericardially, orally, subcutaneously, or intraperitoneally.

27. (Previously Presented) The method of claim 6, wherein the agent is JTV-519.

28. (Previously Presented) The method of claim 4, wherein the amount of an agent is selected from the concentration range of about 100 nM to about 1000 nM.

29. (Previously Presented) The method of claim 4, wherein administering is performed topically, intravenously, pericardially, orally, subcutaneously, or intraperitoneally.

30. (Previously Presented) The method of claim 18, wherein the agent is JTV-519.

31. (Previously Presented) The method of claim 16, wherein the amount of an agent is selected from the concentration range of about 100 nM to about 1000 nM.

32. (Previously Presented) The method of claim 16, wherein administering is performed topically, intravenously, pericardially, orally, subcutaneously, or intraperitoneally.

33. (Currently Amended) A method for treating a human subject afflicted with atrial tachyarrhythmia comprising administering to the human subject a therapeutically effective amount of an agent, which enables FKBP12.6 to bind to PKA-phosphorylated type 2 ryanodine receptor (RyR2) channels in the human subject's heart, thereby treating the human subject, wherein the agent is a N-substituted derivative of 1,4-benzothiazepine.

34. (Previously Presented) The method of claim 33, wherein the atrial tachyarrhythmia is an atrial fibrillation or a supraventricular tachyarrhythmia.

35. (Previously Presented) The method of claim 33, wherein the amount of an agent is selected from the concentration range of about 100 nM to about 1000 nM.

36. (Previously Presented) The method of claim 33, wherein administering is performed topically, intravenously, pericardially, orally, subcutaneously, or intraperitoneally.

37. (Previously Presented) The method of claim 33, wherein the agent is JTV-519.

38. (Currently Amended) A method for inhibiting the onset of atrial tachyarrhythmia in a human subject comprising administering to the human subject a prophylactically effective amount of an agent, which enables FKBP12.6 to bind to PKA-phosphorylated type 2 ryanodine receptor (RyR2) channels in the human subject's heart, thereby inhibiting the onset of an atrial tachyarrhythmia in the human subject, wherein the agent is a N-substituted derivative of 1,4-benzothiazepine.

39. (Previously Presented) The method of claim 38, wherein the atrial tachyarrhythmia is an atrial fibrillation or a supraventricular tachyarrhythmia.

40. (Previously Presented) The method of claim 38, wherein the amount of an agent is selected from the concentration range of about 100 nM to about 1000 nM.

41. (Previously Presented) The method of claim 38, wherein administering is performed topically, intravenously, pericardially, orally, subcutaneously, or intraperitoneally.

42. (Previously Presented) The method of claim 38, wherein the agent is JTV-519.